

**METHOD FOR FORMING QUADRUPLE DENSITY SIDEWALL IMAGE
TRANSFER (SIT) STRUCTURES**

Abstract of the Disclosure

A method is provided for forming a quadruple density sidewall image transfer (SIT) structure. Oxide spacers are formed on opposite sidewalls of a first mandrel. The oxide spacers form a second mandrel. Then sidewall spacers are formed on opposite sidewalls of the oxide spacers forming the second mandrel. A pattern of the sidewall spacers is used to form the quadruple density sidewall image transfer (SIT) structure. The method of the invention enables formation of four well-controlled lines for each lithographically minimum pitch dimension.